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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,622	03/01/2002	Edward A. Grabover	012A.0001.U1 (US)	7933

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EXAMINER

LEUBECKER, JOHN P

ART UNIT PAPER NUMBER

3739

DATE MAILED: 10/06/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,622

Applicant(s)

GRABOVER ET AL.

Examiner

John P. Leubecker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-29 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 8-21 is/are rejected.
- 7) ☒ Claim(s) 3-7 and 22-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 8, term "the frame pieces" lacks antecedent basis. In addition, recitation of a "second active deflection section" without referring back to the previously recite one (claim 1) is ambiguous.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato (U.S. Pat. 3,557,780).

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Sato discloses a shaft with two active deflection sections (II, III, Fig.3) connected in series and a control section (V) for independently deflecting both deflection sections. As to claims 12 and 13, note brake means (col.4, lines 50+). As to claim 14, note ring members (8).

5. Claims 1 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Ouchi (U.S. Pat. 6,547,723).

Referring to at least Figure 14, Ouchi discloses an endoscope having a control section (14) and a shaft extending from the control section, the shaft comprising two active deflection sections (15,24) which are independently controlled to deflect (col.10, lines 1-19) and a passive deflection section (26) between the two active deflection sections. As to claim 14, note ring joints 27 (Fig.26).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8-11 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato.

Sato discloses the deflection sections are adapted to deflect in at least two opposite directions but fails to disclose any particular bending angle range, radius of curvature or length of the deflection sections. These parameters are usually a matter of design choice depending on the desired size of the shaft (e.g., diameter and length) and the desired use of the device. Since the Sato endoscope could potentially be used in any desired endoscope procedure and could be made any sized depending on such procedure, and since the particular parameters claimed in claims 8-11 are not extraordinary in the art, one of ordinary skill in the art would find such parameters obvious as a matter of design choice.

8. Claims 8-11 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ouchi.

Ouchi discloses the deflection sections are adapted to deflect in at least two opposite directions but fails to disclose any particular bending angle range, radius of curvature or length of the deflection sections. These parameters are usually a matter of design choice depending on the desired size of the shaft (e.g., diameter and length) and the desired use of the device. Since the Ouchi endoscope could potentially be used in any desired endoscope procedure and could be made any sized depending on such procedure, and since the particular parameters claimed in claims 8-11 are not extraordinary in the art, one of ordinary skill in the art would find such parameters obvious as a matter of design choice.

9. Claims 1, 2, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (Jap. Pat. 9-24019) in view of Sato (U.S. Pat. 3,557,780).

Kato disclose a shaft (12) extending from a control section (at proximal end of shaft 12) wherein the shaft includes a passive deflection section (portion of shaft 12 with grooves 15) made up of a shape-memory frame member having a generally tubular shape comprised of a superelastic material. Kato fails to disclose an active deflection section. However, Sato teaches use of an active deflection section, and particularly one with first and second active deflection sections, each being independently controllable (note sections II and III in Figure 4). It would have been obvious to one of ordinary skill in the art to have provided the structure necessary to create an active deflection section instead of the passive deflection section of Kato to allow active control of the steering of the distal end, a very desirable feature in the endoscope art. In addition, it would have been obvious to one of ordinary skill in the art to have used any known active deflection structure, including the first and second active deflection sections as taught by Sato. Use of a second active deflection section increases the degree of bending control and thus improves accuracy in obtaining desired curvatures.

Allowable Subject Matter

10. Claims 3-7 and 22-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 27-29 are allowed.

Conclusion

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12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references show independently controlled deflection sections:

Ogura et al. (US 2002/0091304)

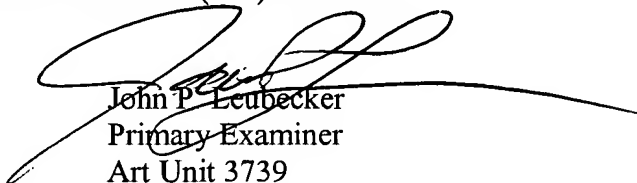
Kondo (U.S. Pat. 5,025,804)

Takayama et al. (U.S. Pat. 5,624,380)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (703) 308-0951. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.


John P. Leubecker
Primary Examiner
Art Unit 3739

jpl